

Some Views on CCS Oversight

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John Venezia
World Resources Institute
jvenezia@wri.org



Today's Talk

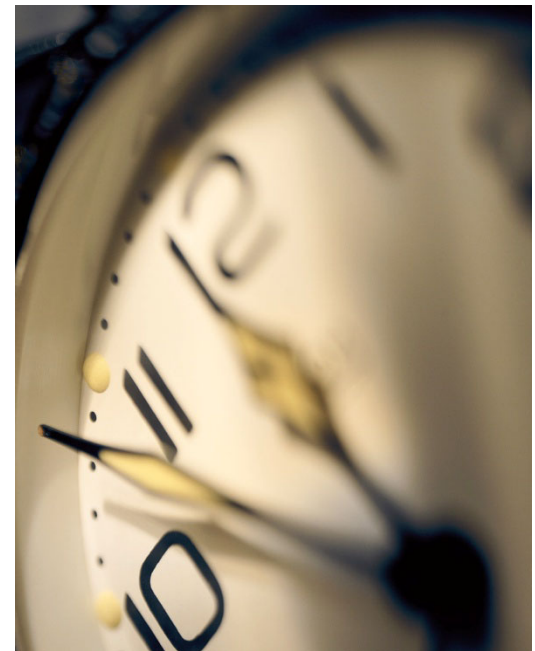
- Public Perception and Acceptability
- Jurisdictional Issues
- Update on WRI project

Some Big-Picture Issues for CCS

- CCS is essential component because we will continue to rely on fossil fuels in the near future
- Technology chain largely exists; but cost reductions and field experience are needed
- Significant voids in policy, regulatory, and institutional frameworks
 - Policy: driver for CCS
 - Regulation: new standards
 - Institutional: greater collaboration

Some Big-Picture Issues for CCS (cont.)

- Timing debate
- Public acceptance uncertain



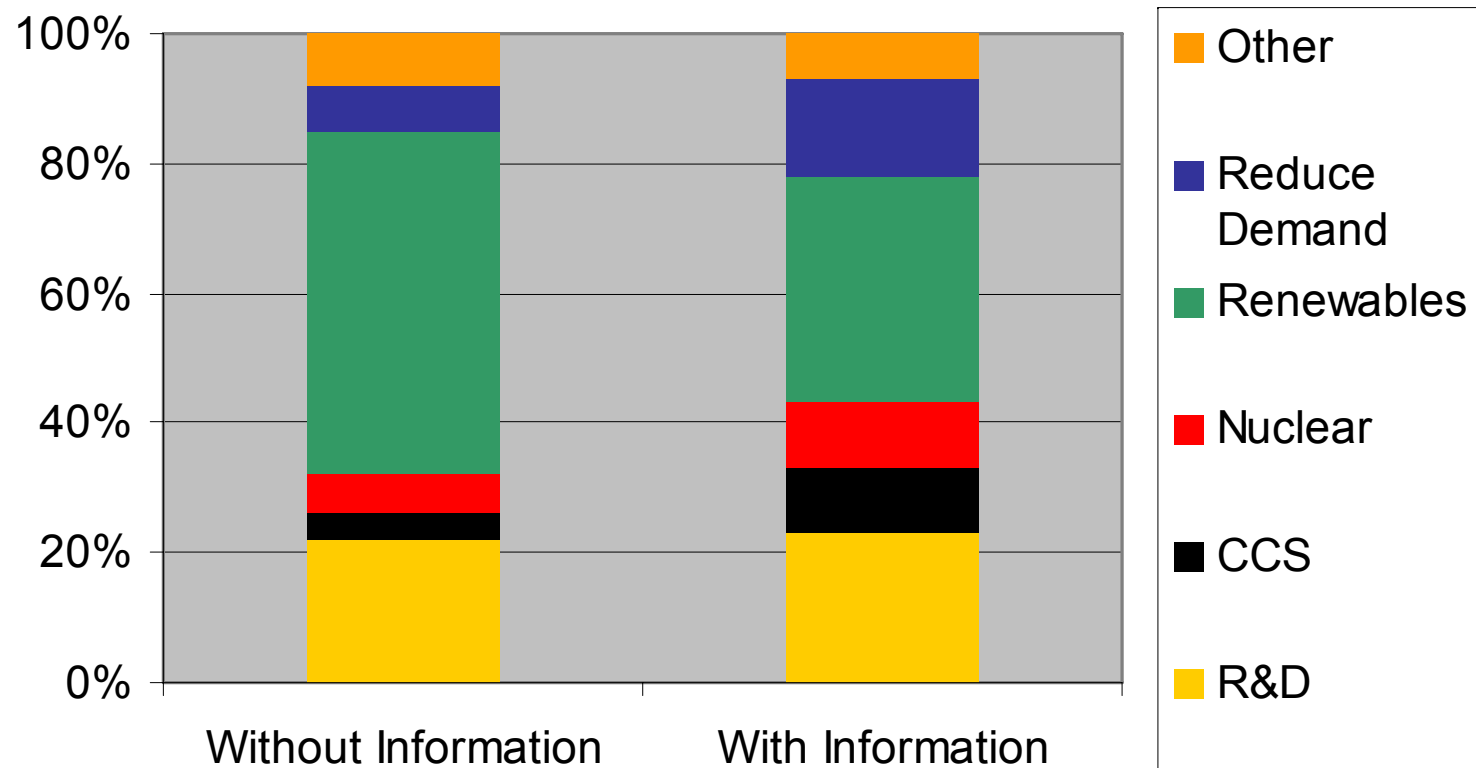
Public Views on CCS

- Local (NUMBY) vs. national debate
- Perceived vs. actual risk
- Cost/distribution
- Low awareness of climate change and energy issues/options



Effects of natural CO₂ release
in Mammoth Lake, CA

Public Support for Different Climate Change Mitigation Strategies



Source: Adopted from MIT Carbon Sequestration Initiative, 2006 Survey.

Reality Check in California?

- Public uncertainty over CCS recently highlighted in California Bill AB 705
 - Accelerated development of a regulatory framework for CCS
 - Failed to clear committee
 - Local NGOs: premature, dangerous, costly
 - Lake Nyos, Frio pilot
 - Need for better information exchange with the public

Emergence of Standards

- EOR
- UIC not designed for sequestration
 - MMV needed
 - Health, safety, environment
- Carbon markets will need confidence
 - New standards for MMV, reporting, verification needed to ensure projects can receive credit for CO₂ reductions
- State-level standards emerging

Need for Federal Framework

- Problems with patchwork: potential for high diversity and corner-cutting
- Weak standards could endanger opportunities for all
- Local expertise is important
- UIC uses federal standards and local expertise, but needs updating for CCS



WRI Project on CCS

- **Objective:** develop guidelines for CCS that can be used as the basis for regulations or industry best practices
- Strength through diverse stakeholders
 - Power, oil & gas, financial, research, federal, state, NGO, legal
- Initial domestic focus, but international outreach component

Anticipated Outcomes

- Adaptable guidelines covering entire process chain
 - Capture, transport, site selection, operation, closure, and long-term care
- Upcoming workshops in Fall 2007
 - Integrate components of draft guidelines under development, build consensus
- Begin testing guidelines in field demonstrations in 2008
- Regulations or industry “best practice”

Conclusions

- Public acceptability is crucial
- Need for federal regulatory framework that acknowledges local expertise
- WRI guidelines will give confidence to public and investors